

CLAIMS

SQSA 5

1. Telephone comprising:
a memorization or indication device for memorizing or indicating data related to incoming and/or outgoing calls on a telephone line; and
a detector for outputting a line state signal of the telephone line to the memorization or indication device; and
wherein the memorization or indication device is operable to memorize or indicate the data as a function of the line state of the telephone line, thereby providing reliable data even when calls originate or terminate from or on another telephone on the telephone line.

10 2. Telephone of claim 1, wherein the memorization or indication device comprises an unanswered call indicator for indicating when an incoming call is not answered as determined from the line state signal.

15 3. Telephone of claim 1, wherein the line state of the telephone is either a busy state or a free state; and wherein the memorization or indication device is operable to memorize communication times of incoming calls by determining time elapsed between two line state changes for each incoming call.

20 4. Telephone of claim 3, wherein the memorization or indication device is operable to memorize received numbers of the incoming calls.

5. Telephone of claim 1, wherein the line state of the telephone is either a busy state or a free state; and wherein the memorization or indication device is operable to memorize duration of outgoing calls by determining time elapsed between two line state changes for each outgoing call.

25 6. Telephone of claim 5, wherein the memorization or indication device is operable to memorize called numbers.

7. Telephone of claim 6, further comprising a called number detector for detecting numbers dialed on the telephone line, thereby memorizing call numbers dialed from other telephones on the telephone line.

30 8. Telephone of claim 7, wherein the called number tone detector is a DTMF decoder.

9. Telephone of claim 1, further comprising:
a processor having a memory; and
a device for receiving programming signals over the telephone line, the
5 programming signal being downloaded to the memory of the processor; and
wherein the processor is operable to restore the data as a function of the
line state of the telephone line.

10. Telephone comprising:
a memorization or indication device for memorizing or indicating data
10 related to incoming and/or outgoing calls on a telephone line; and
a detector for outputting a line state signal of the telephone line to the
memorization or indication device; and
wherein the memorization or indication device is operable to memorize
or indicate the data as a function of the line state of the telephone line.

15. 11. A multiple telephone set, comprising:
at least one telephone comprising a line detector for outputting a line
state signal of a telephone line; and a memorization or indication device for
memorizing or indicating data related to incoming and/or outgoing calls on the
telephone line;
20 at least one telephone without the memorization or indication device;
and
wherein the memorization or indication device is operable to memorize
or indicate the data as a function of the line state of the telephone line, thereby
providing reliable data even when calls originate or terminate from or on another
25 telephone on the telephone line.